

CLAIMS

1. A nerve regeneration-inducing tube, comprising:
a tubular structure (A) made of a biodegradable material or bioabsorbable material including therein a sponge-like matrix (B) made of a biodegradable material or bioabsorbable material and/or a linear nerve inducing channel (C); and
a definite space part formed at one end of the tubular structure (A).
2. The nerve regeneration-inducing tube according to claim 1, wherein a length of the space part is about 1 to 20 mm.
3. The nerve regeneration-inducing tube according to claim 1, wherein the biodegradable material comprises a protein, a polypeptide, or a derivative thereof decomposed by a decomposing enzyme in a living organism, acid, or alkali.
4. The nerve regeneration-inducing tube according to claim 1, wherein the bioabsorbable material comprises a porous substance which allows permeation of liquid and gas.
5. The nerve regeneration-inducing tube according to claim 1, wherein the bioabsorbable material comprises a protein, polypeptide, a derivative thereof, polysaccharide or a derivative thereof, polylactic acid, polyglycolic acid, a copolymer of glycolic acid and lactic acid, a copolymer of lactic acid and ϵ -aminocaproic acid, or aliphatic polyester.
6. The nerve regeneration-inducing tube according to claim 1,

wherein the biodegradable material or bioabsorbable material comprises collagen.

7. The nerve regeneration-inducing tube according to claim 1, wherein the tubular structure (A) is made of a fibrous material.

8. The nerve regeneration-inducing tube according to claim 7, wherein the fibrous material comprises a short fiber, long fiber, filament, floc, textile fabric, or non-woven fabric.

9. The nerve regeneration-inducing tube according to claim 1, wherein the sponge-like matrix (B) comprises a collagen sponge.

10. The nerve regeneration-inducing tube according to claim 1, wherein the nerve-inducing channel (C) is formed by at least one fiber which is inserted into the tubular structure (A) in a longitudinal direction.

11. The nerve regeneration-inducing tube according to claim 1, wherein the nerve-inducing channel (C) is formed by at least one hollow fiber in the tubular structure (A) in the longitudinal direction.

12. The nerve regeneration-inducing tube according to claim 1, wherein the nerve-inducing channel (C) penetrates through the sponge-like matrix (B).

13. The nerve regeneration-inducing tube according to claim 1, wherein the nerve-inducing channel (C) comprises a fiber or hollow fiber.

14. A method of using the nerve regeneration-inducing tube

according to claim 1, comprising:

suturing an end of a central nerve inserted into the space part with the tubular structure (A); and

suturing an end of a peripheral nerve with the end portion devoid of the space part of the tubular structure (A) by means of a bio suture.